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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/779,719	02/08/2001	Edward G. Tiedemann JR.	PA792D1	5285

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QUALCOMM INCORPORATED
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SAN DIEGO, CA 92121

EXAMINER

NGUYEN, TOAN D

ART UNIT	PAPER NUMBER
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2416

NOTIFICATION DATE	DELIVERY MODE
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02/05/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 09/779,719	Applicant(s) TIEDEMANN ET AL.	
	Examiner TOAN D. NGUYEN	Art Unit 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12 and 13 is/are allowed.
- 6) ☐ Claim(s) 1,3-10 and 14 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Response to Arguments

2. Applicant's arguments with respect to claims 1 and 3-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
5. Claims 1, 3-6, 8-9, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hulbert (US 5,713,074) in view of Soliman et al. (US 6,111,857).

For claim 1, Hulbert discloses mobile radio power control device using the comparison of retransmitted data, comprising the steps of:

(A) intentionally transmitting traffic information from the base station (figure 2, reference 20) with a first symbol energy amount that is intentionally insufficient for correct demodulation of the traffic information by a mobile station (figure 2, reference 22)(col. 3, lines 7-10, and col. 3, lines 17-20);

(B) after step (A), retransmitting from the base station (figure 2, reference 20) the traffic information initially transmitted with the first symbol energy amount, wherein the traffic information is retransmitted in step (B) with a further symbol energy amount that is also insufficient by itself for correct demodulation of the traffic information by the mobile station (col. 3 lines 17-20).

However, Hulbert does not expressly disclose:

(C) repeating step (B) until a sum determined at the mobile station of the first and further symbol energy amounts used to transmit the traffic information is great enough to permit correct demodulation by the mobile station.

In an analogous art, Soliman et al. disclose:

(C) repeating step (B) (the allocation of the traffic channel alters the amount of power associated with the particular forward link signal, which in turn can alter the total forward link power received at each location (mobile station) means)(col. 17, lines 60-65) until a sum determined at the mobile station (the total forward link power received at each location (mobile station) is calculated means)(col. 17, lines 47-49) of the first and

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further symbol energy amounts used to transmit the traffic information is great enough to permit correct demodulation by the mobile station (col. 17, lines 49-56).

One skilled in the art would have recognized the (C) repeating step (B) until a sum determined at the mobile station of the first and further symbol energy amounts used to transmit the traffic information is great enough to permit correct demodulation by the mobile station, and would have applied Soliman et al.'s total forward link power received at each location (mobile station means) in Hulbert's mobile station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Soliman et al.'s wireless network planning tool in Hulbert's mobile radio power control device using the comparison of retransmitted data with the motivation being properly demodulated and process given the amount of forward link power is also determined (col. 17, lines 49-56).

For claim 3, Hulbert disclose wherein the further symbol energy amount used for re-transmitting the traffic information in step (B) is determined at the base station using fast forward power control (col. 2, lines 10-11).

For claim 4, Hulbert discloses further comprising the steps of:

(D) determining, at the mobile station (figure 2, reference 22), a received energy value corresponding to the traffic information transmitted from the base station (figure 2, reference 20) in step (A)(col. 3, lines 14-17); and

(E) transmitting the received energy value from the mobile station (figure 2, reference 22) to the base station (figure 2, reference 20)(col. 3, lines 7-10);

(F) wherein the further symbol energy amount used for re-transmitting the traffic information in step (B) is determined at the base station (figure 2, reference 20) in accordance with the received energy value transmitted from the mobile station (figure 2, reference 22)(col. 3, lines 21-24).

For claim 5, Hulbert discloses wherein the received energy value is transmitted from the mobile station to the base station (figure 2, reference 20) using an acknowledgement protocol (col. 3, lines 7-10).

For claim 6, Hulbert discloses wherein acknowledgement protocol is transmitted between the base station (figure 2, reference 20) and the mobile station (figure 2, reference 22) using forward and reverse control channels (col. 3, lines 7-10).

For claim 8, Hulbert disclose wherein the received energy value is transmitted from the mobile station (figure 2, reference 22) to the base station (figure 2, reference 20) using a negative acknowledgement protocol (col. 3, lines 7-10).

For claim 9, Hulbert disclose wherein acknowledgement protocol is transmitted between the base station (figure 2, reference 20) and the mobile station (figure 2, reference 22) using forward and reverse control channels (col. 3, lines 7-10).

For claim 14, Hulbert discloses mobile radio power control device using the comparison of retransmitted data, comprising:

(A) means for intentionally transmitting traffic information from the base station (figure 2, reference 20) with a first symbol energy amount that is insufficient for correct demodulation of the traffic information by a mobile station (figure 2, reference 22)(col. 3, lines 7-10, and col. 3, lines 17-20); and

(B) means for re-transmitting the traffic information with a further symbol energy amount that is also insufficient by itself for correct demodulation of the traffic information by the mobile station (figure 2, reference 22)(col. 3, lines 17-20).

However, Hulbert does not expressly disclose:

(C) means for repeating step (B) until a sum determined at the mobile station of the symbol energy amounts used to transmit the traffic information initially transmitted with insufficient symbol energy for correct demodulation is great enough to permit correct demodulation by the mobile station.

In an analogous art, Soliman et al. disclose:

(C) means for repeating step (B) (the allocation of the traffic channel alters the amount of power associated with the particular forward link signal, which in turn can alter the total forward link power received at each location (mobile station) means)(col. 17, lines 60-65) until a sum determined at the mobile station (the total forward link power received at each location (mobile station) is calculated means)(col. 17, lines 47-49) of the first and further symbol energy amounts used to transmit the traffic information is great enough to permit correct demodulation by the mobile station (col. 17, lines 49-56).

One skilled in the art would have recognized the (C) means for repeating step (B) until a sum determined at the mobile station of the first and further symbol energy amounts used to transmit the traffic information is great enough to permit correct demodulation by the mobile station, and would have applied Soliman et al.'s total forward link power received at each location (mobile station means) in Hulbert's mobile

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station. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Soliman et al.'s wireless network planning tool in Hulbert's mobile radio power control device using the comparison of retransmitted data with the motivation being properly demodulated and process given the amount of forward link power is also determined (col. 17, lines 49-56).

6. Claims 7 and 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Hulbert (US 5,713,074) in view of Soliman et al. (US 6,111,857) further in view of Seo (US 6,581,176).

For claims 7 and 10, Hulbert in view of Soliman et al. does not expressly disclose wherein the traffic information is transmitted in steps (A) and (B) on a supplemental channel, and the forward and reverse control channels have a lower error rate than the supplemental channel. In an analogous art, Seo discloses wherein the traffic information is transmitted in steps (A) and (B) on a supplemental channel, and the forward and reverse control channels have a lower error rate than the supplemental channel (col. 1, lines 53-55).

Seo discloses wherein the traffic information is transmitted in steps (A) and (B) on a supplemental channel, and the forward and reverse control channels have a lower error rate than the supplemental channel (col. 1, lines 53-55 as set forth in claim 10).

One skilled in the art would have recognized the wherein the traffic information is transmitted in steps (A) and (B) on a supplemental channel, and the forward and reverse control channels have a lower error rate than the supplemental channel, and would have applied Seo's SCH in Hulbert's power control device. Therefore, it would

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have been obvious to one of ordinary skill in the art at the time of the invention, to use Seo's method for transmitting control frames and user data frames in mobile radio communication system in Hulbert's mobile radio power control device using the comparison of retransmitted data with the motivation being transmitted the NAK control frames over a supplemental channel (SCH) (col. 1, lines 53-54).

Allowable Subject Matter

7. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 12 and 13 are allowed.

Regarding claim 12, the prior art fails to teach a combination of the steps of:

(C) a buffer in the mobile station that combines retransmitted traffic information from each of the streams of the traffic information until a sum determined at the mobile station of the symbol energy amounts used to transmit the traffic information initially transmitted with insufficient symbol energy for correct demodulation is great enough to permit correct demodulation by the mobile station, in the specific combination as recited in the claim.

Regarding claim 13, the prior art fails to teach a combination of the steps of:

(C) a buffer in the mobile station that combines retransmitted traffic information until a sum determined at the mobile station of the first and further symbol energy amounts used to transmit the traffic information is great enough to permit correct demodulation, in the specific combination as recited in the claim.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TOAN D. NGUYEN whose telephone number is (571)272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. D. N./
Examiner, Art Unit 2416

/William Trost/
Supervisory Patent Examiner, Art Unit 2416